



(19)

(11) Publication number:

1

Generated Document.

PATENT ABSTRACTS OF JAPAN(21) Application number: **10140677**(51) Intl. Cl.: **B01D 63/02 B01D 65/08 C02**(22) Application date: **22.05.98**

| | |
|--|--|
| (30) Priority: (43) Date of application publication: 24.11.99 (84) Designated contracting states: | (71) Applicant: TORAY IND INC (72) Inventor: SAKAI KENJI TANIGUCHI MASAHIRO KIHARA MASAHIRO (74) Representative: |
|--|--|

**(54) HOLLOW FIBER
MEMBRANE MODULE**

(57) Abstract:

PROBLEM TO BE SOLVED: To provide a hollow fiber membrane module whose hollow fiber membranes are prevented from damages due to deterioration of the membranes by installing a protective cylinder for covering the hollow fiber membrane bundle near the adhesive fixation part and preventing deposition of suspended solid in the protective cylinder.

SOLUTION: In this hollow fiber membrane module, a bundle 2 of a large number of hollow fiber membranes having an adhesive fixed part 3 in at least one end is fixed in an upper part of a housing 1 and the circumference of the hollow fiber membrane bundle 2 in the fixed end is covered with a protective cylinder 4 extended from the adhesive fixed part 3 and an air jetting hole 6 for air scrubbing is formed in a lower part of the housing 1 and an air discharge

port 7 is formed in the peripheral part of the adhesive fixed part 3 in the upper part of the housing. In such a hollow fiber membrane module, the cylindrical face of the protective cylinder 4 is made a closed face through which a fluid is impossible to pass in the region at least 10 mm from the adhesive fixed part 3 and an opening part 40 through which a fluid can freely pass is formed in a region of 10-60 mm from the adhesive fixed part 3.

COPYRIGHT: (C)1999,JPO

